Application No.: 10/560,268 Attorney Docket No.: 03528.00149.PCUS00

## THE AMENDMENTS

## In the Specification:

At page 5, amend the second paragraph after "Brief description of the drawings" as follows:

Blockwise conversions of VP protein sequences (<u>SEQ ID NO: 7</u>, VP1 numbering) of AAV-2 to AAV-3 (mutants #1, #2, #3, #4 and #5) are underlayed with grey rectangles. Single mutated amino acids are marked by grey circles. Mutants are numbered according to Table 1.

At page 12, amend the first full paragraph as follows:

(D) Plasmids and Mutagenesis. The DTAV2-0 plasmid (Heilbronn et al. (1990), J. Virol. 64:3012-8) contains the entire AAV-2 genome from pAV-2 (Laughlin et al. (1983) Gene 23:65-73) including both inverted terminal repeats cloned into the BamHI site of pbluescript II. The pJ407 plasmid which was used as the template for the site-directed mutagenesis reactions contains the BamHI-NotI fragment of the AAV-2 genome from pTAV2-0 cloned into pUC131. Mutagenesis was performed by using the Stratagene QuikChange Site-Directed Mutagenesis Kit (Stratagene, Amsterdam, Netherlands) according to the manufacturers manufacturer's protocol. For each mutant, two complementary PCR Primers were designed which contained the sequence of the substitution or deletion, respectively, flanked by 15 to 20 homologous base pairs on each side of the mutation. Mutant plasmids were identified by DNA sequencing. The BsiWI-XcmI (respectively XcmI-EcoNI) fragment containing the mutation was then subcloned into the pTAV2-0 backbone. The complete fragment was sequenced to check for additional PCR mutations. Deletion mutant #6 was constructed by inserting a double stranded oligo (5-CGTTAACCCAGGCATGGTCTGGGC-3', SEQ ID NO: 1, 5'-

CCCAGACCATGCCTGGGTTAACGCATG-3', SEQ ID NO: 2) providing an additional XcmI site into the SphI site of mutant #29. The resultant plasmid was digested by XcmI and religated.

At page 15, amend the paragraph after (K) Detection of AAV genomes by PCR as follows:

Genomic DNA was extracted from organs using the Qiamp Tissue Kit (Qiagen, Hilden, Germany). 800 ng genomic DNA was used for PCR-amplification (40 cycles) of a 677 bp

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fragment of the luciferase gene using the primers 5'-GACGCCAAAAACATAAAGAAAG-3', SEQ ID NO: 3, and 5'-CCAAAAATAGGATCTCTGGC-3', SEQ ID NO: 4, under standard conditions. Integrity of DNA was determined by amplifying a 492 bp region of the murine β-actin gene using the primers 5'-ATGTTTGAGACCTTCAACAC-3', SEQ ID NO: 5, and 5'-AACGTCACACTTCATGATGG-3', SEQ ID NO: 6. PCR products were analyzed by gel electrophoresis (1.5%; w/v).